CHAPTER IV
FINDINGS AND DISCUSSION

This chapter discusses about the findings of the research based on the data which the data were collected and analyzed.

A. Research Findings

1. Data Description

The data of this study was the score of students' mastery of past tense and students' writing past recount text. This study was contucted at SMA N 1 Kotawaringin Lama in which seventh grade students, which located at Jl. Pangkalan Muntai Km. 2 Kotawaringin Lama, Kabupaten Kotawaringin Barat. The research was conducted from March 26th 2016up to April 9th 2016. In this study researcher used quantitative correlation method. To collect the data the writer used test. There were two tests that was given to the participants. It was past tense test and writing test. The test of past tense was conducted by the writer was multiple choice and the test of writing test that was conducted by the writer was writing past recount text. To find out the correlation between students' mastery of past tense and students' writing past recount text the writer used product moment correlation.

a. Students' Mastery of Past Tense

Researcher used multiple choice test tomeasure students' mastery of past tense. There were 25 questions and 4 alternative answersfor each question. Based on the test that was given to eleventh

grade students of SMA N 1 Kotawaringin Lama the total score in terms of past tense mastery was 2396. The average result was 59.9. The higher score was 90. The lower score was 40. The result can be seen in table 4.1:

Table 4.1

The Score of Stuents Mastery of Past Tense (X)

at Elventh Grade Students of SMA N 1 Kotawaringin lama

No.	Students' Name	Score Answer (X)
1	AS	40
2	ARP	80
3	AN	96
4	AAP	80
5	AG	52
6	CDP	72
7	DP	72
8	DMA	60
9	EA	48
10	FAF	60
11	FK	52
12	GMD	56
13	Hm	52
14	HAP	44
15	ITS	68
16	LH	40
17	MD	48
18	MFYP	68
19	MI	68
20	MR	52
21	NA	80
22	NR	56
23	Nk	60
24	PKR	52
25	Rb	52
26	Rd	64

27	RP	60
28	RM	60
29	RA	56
30	RP	64
31	Sn	40
32	SJ	48
33	SLA	48
34	SM	92
35	SA	76
36	Sr	48
37	UW	64
38	WA	60
39	Wsm	48
40	Yl	60
Average		**59.9**
Higher		**90**
Lower		**40**
Std. Deviation		**13.450**

Based on the data above, it can be seen in chart gaps:

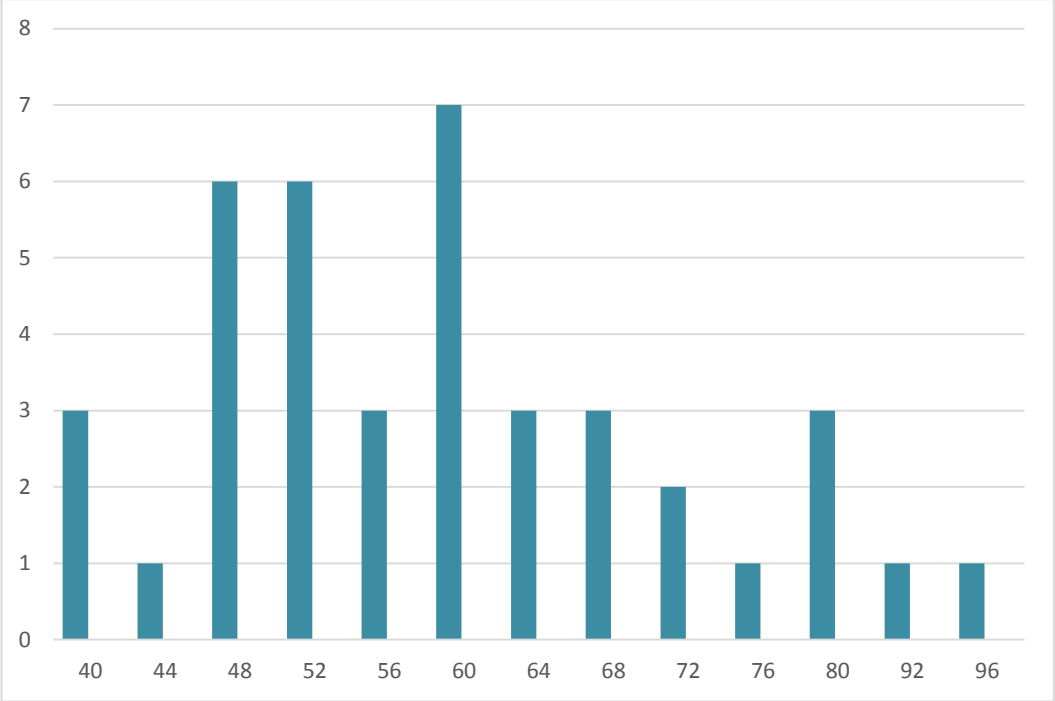

Figure 4.1 Past Tense Score

It showed that table and figure above, the students' score in past tense. There were 3 students who got score 40. There was one student who got score 44. There were six students who got score 48. There were six students who got score 52. There three students who got score 56. There were seven students who got score 60. There were three students who got score 64. There were three students who got score 68. There were two students who got score 72. There was one student who got score 76. There were three students who got 80. There was one student who got score 92. And there was one student who got score 96.

b. Students' Achievement in Writing Past Recount Text

To know the students' achievement in writing past recount text, researcher used a writing test. Researcher asked the students to write at least three paragraphs about their yesterday's activity. The total score in writing past recount text of eleventh grade students of SMAN 1 Kotawaringin Lama was 2610. The average score of the students was 64.41.The higher score was 80.5. The lower score was 30.The result can be seen in table 4.2:

Table 4.2

The Score of Stuents Achievement in Writing Past Recount Text (Y) at ESleventh Grade Students of SMA N 1 Kotawaringin lama

No.	Students' Name	Score Answer (Y)
1	AS	45
2	ARP	72.5

3	AN	76
4	AAP	65
5	AG	63
6	CDP	66.5
7	DP	65.5
8	DMA	61
9	EA	62.5
10	FAF	63
11	FK	67
12	GMD	63
13	Hm	66.5
14	HAP	30
15	ITS	71.5
16	LH	59
17	MD	65
18	MFYP	30
19	MI	64
20	MR	30
21	NA	64
22	NR	74.5
23	Nk	72.5
24	PKR	66
25	Rb	67
26	Rd	70
27	RP	69
28	RM	64.5
29	RA	73.5
30	RP	71.5
31	Sn	71
32	SJ	67.5
33	SLA	64
34	SM	80.5
35	SA	78.5
36	Sr	78.5
37	UW	65
38	WA	68
39	Wsm	59
40	Yl	66
Average		**64.41**

Higher	**80.5**
Lower	**30**
Std. Deviation	**64.22**

Based on the data above, it can be seen in chart gaps:

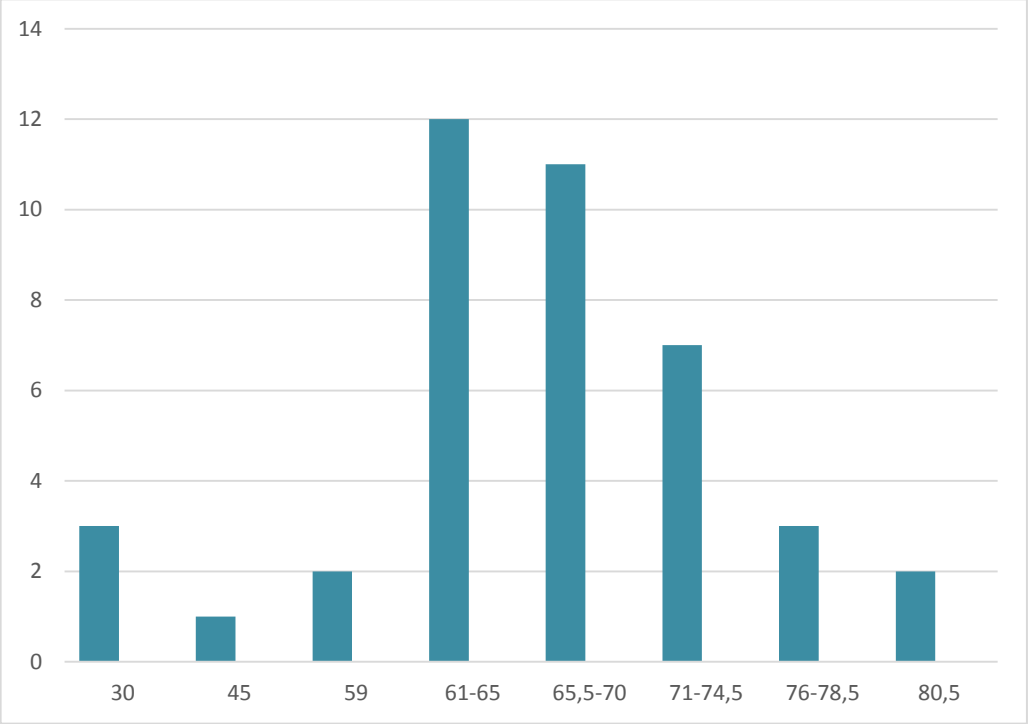

Figure 4.2 Writing Score

It showed that table and figure above, the students' score in writing past recount text. There were 3 students who got score 30. There was one student who got score 45. There were one student who got score 59. There were twelve students who got score 61-65. There eleven students who got score 65.5-70. There were seven students who got score 71-74.5. There were three students who got score 76-78.5. And there was one student who got score 80.5.

The comparison both of the result of the score can be seen in table 4.3:

Table 4.3

Comparison Students' Past Tense Score and Writing Score

No.	Students' Name	Score	
		Past Tense	Writing
1	AS	40	45
2	ARP	80	72.5
3	AN	96	76
4	AAP	80	65
5	AG	52	63
6	CDP	72	66.5
7	DP	72	65.5
8	DMA	60	61
9	EA	48	62.5
10	FAF	60	63
11	FK	52	67
12	GMD	56	63
13	Hm	52	66.5
14	HAP	44	30
15	ITS	68	71.5
16	LH	40	59
17	MD	48	65
18	MFYP	68	30
19	MI	68	64
20	MR	52	30
21	NA	80	64
22	NR	56	74.5
23	Nk	60	72.5
24	PKR	52	66
25	Rb	52	67
26	Rd	64	70
27	RP	60	69
28	RM	60	64.5
29	RA	56	73.5
30	RP	64	71.5

31	Sn	40	71
32	SJ	48	67.5
33	SLA	48	64
34	SM	92	80.5
35	SA	76	78.5
36	Sr	48	78.5
37	UW	64	65
38	WA	60	68
39	Wsm	48	59
40	Yl	60	66
Average		**59.9**	**64.41**
Higher		**90**	**80.5**
Lower		**40**	**30**
Std. Deviation		**13.450**	**64.22**

2. Data Analysis

Before analyzed the data, the normality, homogeneity, and linearity distribution of the data sets the two variables (mastery of past tense and writing past recount text) were firstly tested.

a. Test of Normality

The normality test was conducted using SPSS 16.0 program. The normality was conducted in order to know whether the populations from which samples were taken was normally or not. The result normality test is presented in table 4.4:

Table 4.4

Test of Normality

One-Sample Kolmogorov-Smirnov Test

		past tense	Writing
N		40	40
Normal Parameters[a]	Mean	59.90	64.22
	Std. Deviation	13.450	11.619
Most Extreme Differences	Absolute	.147	.258
	Positive	.147	.102
	Negative	-.088	-.258
Kolmogorov-Smirnov Z		.930	1.632
Asymp. Sig. (2-tailed)		.353	.110

a. Test distribution is Normal.

Based on the result of normality using SPSS 16.0 program. It found that kolmogrov-smirnov Z of the test score of past tense=0,930and test score of writing=1.632 which are higher than significance 0.05. Thus, it could be concluded that the null hypothesis was accepted and the data was normally distributed.

b. Test of Homogeneity

The homogeniety test was calculated using SPSS 16.0 program. The homogeneity test is conducted in order to know whether the equality (homogeneity) some samples. The result of homogeneity presented in table 4.5:

Table 4.5

Test of Homogeneity

Test of Homogeneity of Variances

Writing

Levene Statistic	df1	df2	Sig.
2.567	8	27	.032

Based on the result of homogeneity using SPSS 16.0 program, it found that significance=0.032 is lower than 0.05, it means that the data is not homogeny.

c. Test of Linearity

The linearity of mastery of pasttense and writing past recount text were analyzed by using SPSS 16.0 program and presented using ANOVA table. The result of analysis was presented in the table 4.6:

Table 4.6

Test of Linearity

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
writing * past tense	Between Groups	(Combined)	2450.618	12	204.218	1.959	.072
		Linearity	627.956	1	627.956	6.024	.021
		Deviation from Linearity	1822.662	11	165.697	1.590	.158
	Within Groups		2814.357	27	104.235		
	Total		5264.975	39			

The table above reveals the linearity distribution of the data of both (mastery of past tense and writing past recount text). It can be seen that significance=0.158 is higher than 0.05, it means there is significance between students' mastery of past tense and students' achievement in writing past recount text.

d. Test of Hypothesis Using Pearson Product Moment Correlation

1. Manual Calculation

After calculating the total scores of the variables of this study, past tensemastery (X) and writing past recount text (Y), the data analysis of this study is carried on to investigate the reletionship between both of the varibles. It was analyzed by using Pearson Product moment. The Pearson ProductMoment correlation is symbolized with r_{xy}. To get the score r_{xy}, firstly the scores of $\sum xy$, $\sum x^2$, and $\sum y^2$ are looked for, and these are presented in table 4.7:

Table 4.7

Data Analysis

Students' Name	X	X^2	Y	Y^2	XY
AS	40	1600	45	2025	1800
ARP	80	6400	72.5	5256	5800
AN	96	9216	76	5776	7296
AAP	80	6400	65	4225	5200
AG	52	2704	63	3969	3276
CDP	72	5184	66.5	4422	4788
DP	72	5184	65.5	4290	4716
DMA	60	3600	61	3721	3660
EA	48	2304	62.5	3906	3000
FAF	60	3600	63	3969	3780
FK	52	2704	67	4489	3484

GMD	56	3136	63	3969	3528
Hm	52	2704	66.5	4422	3458
HAP	44	1936	30	900	1320
ITS	68	4624	71.5	5112	4862
LH	40	1600	59	3481	2360
MD	48	2304	65	4225	3120
MFYP	68	4624	30	900	2040
MI	68	4624	64	4096	4352
MR	52	2704	30	900	1560
NA	80	6400	64	4096	5120
NR	56	3136	74.5	5550	4172
Nk	60	3600	72.5	5256	4350
PKR	52	2704	66	4356	3432
Rb	52	2704	67	4489	3484
Rd	64	4096	70	4900	4480
RP	60	3600	69	4761	4140
RM	60	3600	64.5	4160	3870
RA	56	3136	73.5	5402	4116
RP	64	4096	71.5	5112	4576
Sn	40	1600	71	5041	2840
SJ	48	2304	67.5	4556	3240
SLA	48	2304	64	4096	3072
SM	92	8464	80.5	6480	7406
SA	76	5776	78.5	6162	5966
Sr	48	2304	78.5	6162	3768
UW	64	4096	65	4225	4160
WA	60	3600	68	4624	4080
Wsm	48	2304	59	3481	2832
Yl	60	3600	66	4356	3960
∑	X=2396	X^2=150576	Y=2576.5	Y^2=171318	XY=156464

Next, the scores of r_{xy} is calculated by the Pearson Product Moment Correlation formulaas follows.

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

$$r_{xy} = \frac{40(156464) - (2396)(2576,5)}{\sqrt{\{40(150576) - (2396)^2\}\{40(171318) - (2576,5)^2\}}}$$

$$r_{xy} = \frac{6258560 - 6173294}{\sqrt{\{6023040 - 5740816\}\{6852720 - 6638352\}}}$$

$$r_{xy} = \frac{85266}{\sqrt{\{282224\}\{214367.75\}}}$$

$$r_{xy} = \frac{85266}{\sqrt{60499723876}}$$

$$r_{xy} = \frac{88146}{245966.9162}$$

$$r_{xy} = 0,34665638$$

$$r_{xy} = 0.347$$

After the score r_{xy} is obtained, it is compared with the score of r_{table}. To find out the critical value of r_{table} the writer firstly must find the degrees of significant 5%. The formula of Df as follows:

Df = N – 2

= 40 – 2

= 38

Df = degree of freedom

N = total number of research population

After found the Df, it known that r_{table} with Df = 38, 5% significant is 0.312.

2. SPSS Calculation

To make sure the result of the calculation above, researcher used SPSS program. The using SPSS is to know whether the

calculation that the writer did manually was correct and to make sure that there is no mismatching calculation between scores that the writer counted manually. The calculation of SPSS was describe in table 4.8:

Table 4.8

SPSS Correlation

Correlations

		past tense score	writing score
past tense score	Pearson Correlation	1	.345*
	Sig. (2-tailed)		.029
	N	40	40
writing score	Pearson Correlation	.345*	1
	Sig. (2-tailed)	.029	
	N	40	40

*. Correlation is significant at the 0.05 level (2-tailed).

It could be interpreted based on the result of calculation that H_a there was a significance positive correlation between the students' mastery of past tense and writingpast recount text. It meant that the mastery of past tense gave significance positive correlation on students writing past recount text at eleventh grade students of SMA N 1 Kotawaringin Lama.

B. Interpretation of The Result

From the computation above, it can be seen that the value of $r_{xy}$is 0.347. To know whether there is a significant correlation between the two variables or not, the r_{xy} value is consulted to the critical value of r_{table} with Df=38, 5% significant is 0.312 and 1% significance is 0,403. Therefore, it can

be concluded that r_{xy} is greater than r_{table} in other words, 0.347 is greater than 0.312 and lower than 0,403.

Based on the hypothesis it can be concluded that H_o is rejected and H_a is accepted. It means that there is correlation between students' mastery of past tense and student' achievement in writing past recount text.The table of of "r" product moment is such in table 4.9:

Table 4.9

Interpretation of Correlation Product Moment

The score of "r" Product Moment (r_{xy})	**Interpretation**
0.00-0.100	There is a correlation between Xand Y, but the correlation is very weak or little. So its considred no significan correlation in this rating.
0.20-0.399	There is a correlation between X and Y. The value is low
0.40-0.599	There is a correlation between X and Y. The value is medium.
0.60-0.799	There is high correlation between X and Y.
0.8-1.000	There is very high correlation between X and Y.

Based on the finding, the table of "r" product moment show that the correlation value is on the "low" size, in which between 0.20-0.399. It meant, between variable X and variable Y there was low correlation. The result of the

calculation that was counted by the product moment above showed that the result was 0.347, so that H_a accepted and H_o was rejected.

Even so, it was known the result of "r" =0,403>0.347>0.312 it can be explain that the value of "r" was higher than 5%, the value of "r" was there was low correlation and the correlation was positive.

if $r_{xy} \geq r_{table}$ refused H_a it meant it was significant and if $r_{xy} \leq r_{table}$ - received H_o, it meant it was not significant. Based on the calculation above 0.347 and n = 40, so df = n – 2 = 38 and r_{table} was 0.312So, it can be seen that $r_{xy} > r_{table}$5% so that the result was the H_a was accepted and H_o was refused. In this case that variable X (mastery of past tense) ensures students' to do good writing past recount text.

And to know the contribution of the variable X (mastery of past tense) and variable Y (writing past recount text) was used the formula as below:

$KP = r^2 \times 100\%$[1]

Where:

KP = determinant coefficient score

r = correlation coefficient score

$KP = r^2 \times 100\%$

$= 0.347^2 \times 100$

[1]Riduwan, *Metode dan Teknik Menyusun Tesis*, p. 138

=0.120 x 100%

=12.04%

So it meant that the variable X (mastery of past tense) gave the contribution' in writing past recount text was 12.04% and 78.96% was influenced by other aspects.

C. Discussion

The purpose of the data analysis in this research is used to measure the significant correlation between the students' mastery of past tense and writing past recount text at SMA N 1 Kotawaringin Lama.

Based on the data description and data analysis above, it can be seen the avarage score (mean) of mastery of past tense is 59.9 and the mean score of writing pat recount text is 64.41.

According tothe result the calculation of data analysis, the score of correlation coeficient (r_{xy}) is higher than score in r table (r_{table}). In this case, the correlation coeficient (r_{xy}) found is 0.347; while the r table (r_{table})score in the significant of 5% is 0.312. therefore, the correlation coeficient (r_{xy})= 0.347>r table (r_{table})= 0.312. it meant that a correlation exists between two variables. In other words, there is significan correlation between students' mastery of past tense and writing past recount text.

Moreover, based on the calculation of determination coefficient (KP) obtained, mastery of past tense has12.04%% constribution towards writing past recount text at eleventh grade students' SMA N 1 Kotawaringin Lama. Inother

words, the achievment in writing past recount text is influenced by12.04% of their mastery of past tense and87.96% was influenced by other aspects, for example writers' knowledge, vocabulary mastery and so on.

Besides, the r_{xy} can also interpreted with the table of *"r" score product moment*(the table can be seen in the forth chapter or in Table 4.9). based on Table 4.9, the r_{xy} score resulted in this study is 0.347. It places in the range of 0.20-0.399. It indicated that there is lowcorrelation between two variables (mastery of past tense and writing past recount text). Hence, it can be interpreted that the mastery of past tense has low correlation with their writing past recount text of eleventh grade srudents at SMA N 1 Kotawaringin lama. This is in accordance with Siti Istiqomah's opinion thatas one of components of writing, grammar takes an important role in writing and clearly it effects one's writing. The better one's grammar mastery, the better his or her writing.[2] Therefore, the students who have good grammar especially past tense, they must have good writing skill as well, particularly writing past recount text.

[2]Istiqomah Siti, *Journal ofCorrelation Betweem Grammar Mastery and Descriptive Writing Ability*, p.3